

## ABSTRACT

The present invention is a sheath-core composite conductive fiber comprising a sheath component made of a fiber-forming polymer containing conductive carbon black, characterized in that, with respect to an inscribed circle of a core component and an inscribed circle of a sheath component in a cross section of the fiber, a radius ( $R$ ) of the inscribed circle of the sheath component and a distance ( $r$ ) between the centers of two inscribed circles satisfy a specific relationship, and a sheath-core composite conductive fiber comprising: a core component made of a polyester containing ethylene terephthalate as a main component, and a sheath component made of a mixture of a copolyester wherein ethylene terephthalate accounts for 10 to 90 mol% of constituent units thereof and carbon black. The conductive fiber of the present invention can be used alone or in combination with other fibers in various applications, e.g., special working clothes such as dust-free clothes and interiors such as carpets.